MULTIMEDIA UNIVERSITY

STUDENT ID NO

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# MULTIMEDIA UNIVERSITY

# FINAL EXAMINATION

**TRIMESTER 2, 2022/2023**

## PPE0054 – BASIC MACROECONOMICS

(Foundation in Business)

10 JULY 2023
9.00 a.m. – 11.00 a.m.
(2 Hours)

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**INSTRUCTIONS TO STUDENT**

1. This question paper consists of 11 pages with 2 sections.
2. Attempt **ALL** questions in Section A and Section B. The distribution of the marks for each question is given.
3. Please write all your answers for Section A on the OMR form provided and all answers for Section B in the Answer Booklet provided.

## SECTION A: MULTIPLE CHOICE QUESTIONS [30 MARKS]

**Instructions:** Answer **ALL** questions in this section. Shade the answers on the **OMR** sheet.

1. Which of the following are economic "mediums of exchange"?
   A. goods for goods
   B. money for goods
   C. beef for chickens
   D. all of the above

2. Santiago finds RM20 in his jacket pocket and deposits it into a bank. As a result of this single transaction, M1 has _____.
   A. not changed
   B. increased by RM20
   C. increased by less than RM20
   D. increased by more than RM20

3. In addition to lowering the discount rate to increase the money supply, the central bank could also _____.
   A. purchase bonds on the open market and raise reserve requirements
   B. sell bonds on the open market and raise reserve requirements
   C. purchase bonds on the open market and lower reserve requirements
   D. sell bonds on the open market and lower reserve requirements

4. Based on the model of the money market, if prices in the economy decrease, the equilibrium interest rate should _____.
   A. stay the same
   B. increase
   C. decrease
   D. increase to the same extent that the supply of money increases

5. As the central bank _____ bonds, interest rates rise and the price of bonds _____.
   A. buys; rises
   B. sells; rises
   C. buys; falls
   D. sells; falls

6. Suppose a bank has $100 million in checking account deposits with no excess reserves and the required reserve ratio is 20 percent. If the central bank reduces the required reserve ratio to 15 percent, then the bank will now have excess reserves of _____.
   A. $0
   B. $5 million
   C. $15 million
   D. $20 million

**Continued...**

7. A decrease in the reserve requirement _____ bank reserves and _____ the money supply.
   A. increases; increases
   B. increases; decreases
   C. decreases; increases
   D. decreases; decreases

8. The speculative demand for money is related to which function of money?
   A. Medium of exchange
   B. Unit of accounting
   C. Store of value
   D. Standard of deferred payment

9. Which one of the following individuals is **NOT** counted as unemployed?
   A. a recent college graduate currently without any employment and looking for her first full-time job
   B. a 35-year-old woman fired from her prior work because of poor performance and looking for another job
   C. a 50-year-old woman laid off from her former job because of a downturn in the company's sales and looking for another job
   D. a 22-year-old aspiring actress currently without any show business employment, but working temporarily as a waitress while she auditions for acting jobs

10. Under which one of the following situations would you be better off?
    A. You have $10,000 in your savings account paying 5 percent per year and unanticipated inflation is 8 percent per year.
    B. You have paid $500 for a $1,000 U.S. savings bond that matures in 10 years and unanticipated inflation is 10 percent per year.
    C. You lend a friend $1,000 at 6 percent to be repaid in one year and unanticipated inflation is 7 percent during the year.
    D. You borrowed $2,500 at 7 percent to pay for this year's college expenses and unanticipated inflation is 12 percent during the year.

11. Assume you borrow funds to buy a new car at 10 percent interest and you think that the economy-wide rate of inflation over the life of the loan will be 8 percent. If you are correct in your assumption, your real rate of interest on the car loan will be _____.
    A. 2 percent
    B. 8 percent
    C. 10 percent
    D. 18 percent

12. Borrowers gain and lenders lose when _____.
    A. the anticipated rate of inflation is greater than the actual rate of inflation
    B. the anticipated rate of inflation is less than the actual rate of inflation
    C. the anticipated rate of inflation is the same as the unanticipated rate of inflation
    D. the unanticipated rate of inflation is zero

**Continued...**

13. Bob's assembly line job has been replaced by robots, and Bob lacks the abilities and skills required to attain other jobs. He is considered as _____.
    A. structurally unemployed
    B. frictionally unemployed
    C. seasonally unemployed
    D. a discouraged worker

14. Economists consider full employment to occur when _____.
    A. everyone who wants a job has a job
    B. frictional unemployment equals zero
    C. the sum of frictional unemployment and structural unemployment equals zero
    D. the unemployment rate consists of only frictional and structural unemployment

Refer to ***Exhibit 1*** for question no.15.

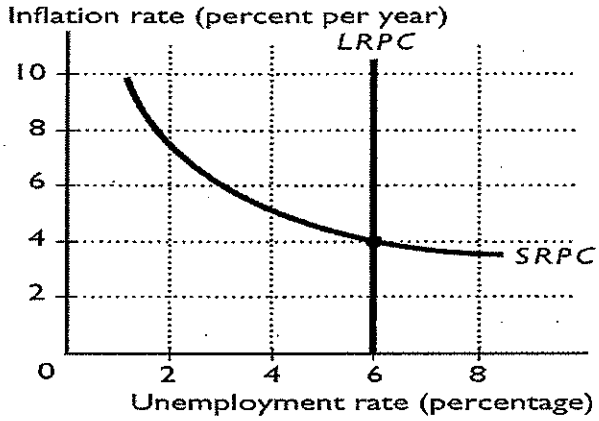


***Exhibit 1***

15. Refer to ***Exhibit 1***. The natural unemployment rate is _____.
    A. 2 percent
    B. 4 percent
    C. 6 percent
    D. 8 percent

16. If Canada imports fishing poles from Mexico and Mexico imports beef from Canada, which of the following would explain this pattern of trade?
    A. The opportunity cost of producing fishing poles in Canada is higher than the opportunity cost of producing beef in Mexico.
    B. Mexico must have an absolute advantage in producing fishing poles and Canada must have an absolute advantage in beef.
    C. Mexico has a higher opportunity cost of producing fishing poles than Canada, and Canada has a higher opportunity cost of producing beef.
    D. Canada has a lower opportunity cost of producing beef than Mexico and Mexico has a comparative advantage in producing fishing poles.

**Continued...**

Refer to ***Exhibit 2*** for question no.17.

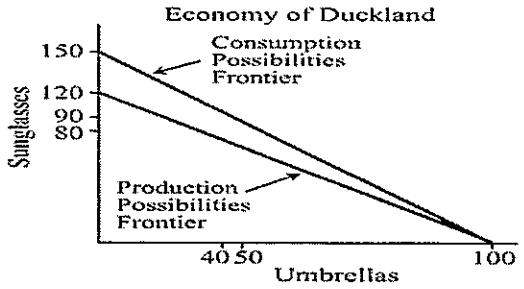


***Exhibit 2***

17. Refer to ***Exhibit 2***. Duckland has a comparative advantage in the production of _____.
    A. sunglasses
    B. umbrellas
    C. both umbrellas and sunglasses
    D. neither umbrellas nor sunglasses

18. Which of the following is the best example of a quota?
    A. A tax placed on all sport utility vehicles sold in the domestic market.
    B. A RM5,000 per-car fee imposed on all sport utility vehicles imported into Malaysia.
    C. A limit imposed on the number of sport utility vehicles that Malaysia can import from Japan.
    D. A subsidy granted by Malaysian government to domestic garment manufacturers so they can compete more effectively with foreign garment manufacturers.

19. When a country imports a good, the _____ to consumers is _____ the _____ to producers.
    A. gain; larger than; loss
    B. loss; larger than; gain
    C. loss; smaller than; gain
    D. gain; smaller than; loss

Refer to ***Exhibit 3*** for question no.20. ***Exhibit 3*** shows domestic demand and domestic supply schedules for a good.

| Price (RM per unit) | Quantity demanded (units per day) | Quantity supplied (units per day) |
|---|---|---|
| 2 | 20 | 14 |
| 4 | 19 | 16 |
| 6 | 18 | 18 |
| 8 | 17 | 20 |
| 10 | 16 | 22 |
| 12 | 15 | 24 |

***Exhibit 3***

**Continued...**

20. Based on ***Exhibit 3***, if the world price of the good is RM10, _____.
    A. the country would export 6 units a day
    B. the country would import 6 units a day
    C. the country would import 16 units a day
    D. domestic production would be higher before trade than after trade

21. Which of the following would reduce the current account balance of the United States?
    A. a decrease in imports
    B. a decrease in the amount of money the U.S. government sends in foreign aid to other countries
    C. a decrease in the balance of trade
    D. a decrease in the amount of income U.S. companies pay out to foreigners who own investments in the U.S.

22. The U.S. current account equals _____.
    A. U.S. exports + U.S. imports + net income from foreign investments + net transfers from abroad
    B. U.S. imports - U.S. exports + net income from foreign investments + net transfers from abroad
    C. U.S. exports - U.S. imports + net income from foreign investments + net transfers from abroad
    D. U.S. exports - U.S. imports - net income from foreign investments + net transfers from abroad

23. When the official reserves _____, the official settlements account balance becomes positive and when the official reserves _____, the official settlements account balance becomes negative.
    A. decrease; decrease
    B. decrease; increase
    C. increase; decrease
    D. increase; increase

24. Which of the following is **NOT** included in the U.S. capital account?
    A. change in private U.S. assets held abroad
    B. income received on investments
    C. change in foreign assets held in the United States
    D. change in U.S. government assets held abroad

25. If Californians increase their purchases of Italian wine, assuming all else remains constant, this will _____ of the United States.
    A. reduce the balance of trade
    B. raise the current account balance
    C. reduce the trade deficit
    D. reduce the balance of payments

**Continued...**

26. When the economy experiences a balance of payments surplus, the central bank must _____ to maintain the exchange rate.
    A. sell bonds
    B. buy home currency
    C. sell foreign currency
    D. buy foreign currency

Refer to ***Exhibit 4*** for questions no.27 and no.28.

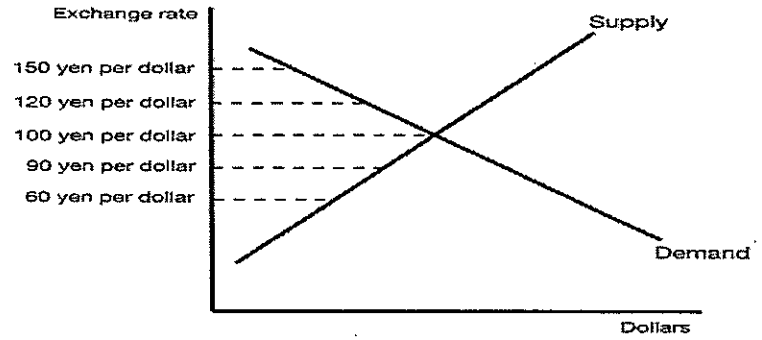


***Exhibit 4***

27. Refer to ***Exhibit 4***. If the exchange rate is currently 120 yen per dollar, then we expect the dollar to _____ and the yen to _____.
    A. depreciate; depreciate
    B. depreciate; appreciate
    C. appreciate; depreciate
    D. appreciate; appreciate

28. Refer to ***Exhibit 4***. Japanese goods will become cheaper in the United States if the exchange rate goes from _____ to _____ yen to the dollar.
    A. 100; 90
    B. 100; 120
    C. 120; 90
    D. 120; 60

Refer to ***Exhibit 5*** for question no.29.

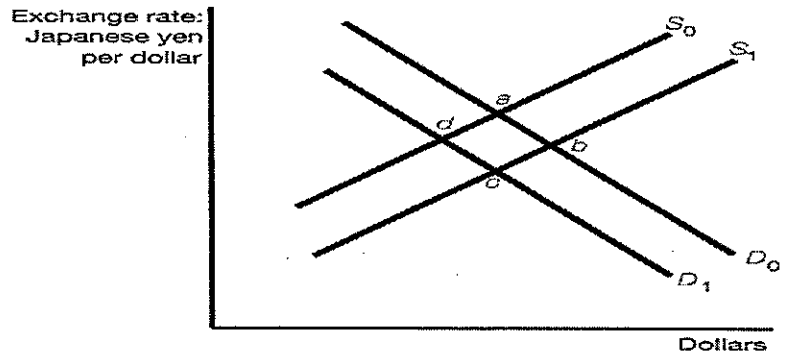


***Exhibit 5***

**Continued...**

29. Refer to ***Exhibit 5***. The effect of an increase in the U.S. interest rates is represented by a movement (shift) from point _____.
    A. *d* to *a*
    B. *b* to *c*
    C. *a* to *b*
    D. *d* to *c*

Refer to ***Exhibit 6*** for question no.30.

| Country | Units of Foreign Currency per U.S. Dollar | U.S. Dollars per Unit of Foreign Currency |
|---|---|---|
| Mexican peso | 10.00 | |
| British pound | 0.50 | |

***Exhibit 6***

30. Refer to ***Exhibit 6***. Given the following exchange rates in the above table, what are the exchange rates stated as U.S. dollars per Mexican peso and U.S. dollars per British pound respectively?
    A. 0.10 dollars per peso and 2.00 dollars per pound
    B. 0.01 dollars per peso and 0.20 dollars per pound
    C. 0.10 dollars per peso and 5.00 dollars per pound
    D. 0.01 dollars per peso and 0.50 dollars per pound

## SECTION B: STRUCTURED QUESTIONS [70 MARKS]

**Instructions:** Answer **ALL** questions in this section. Write your answers in the Answer Booklet.

***Question 1***

**Part A**

Suppose a firm deposit RM1 million in currency into its checking account in Bank of Commerce.

a) Show this transaction on Bank of Commerce's balance sheet.

(1.5 marks)

b) After depositing RM1 million, but before any other actions,
    i. how much is the bank's required reserves and excess reserves if the required reserve ratio is 5 percent.

(4 marks)

    ii. what is the maximum amount of loan that can be given out by Bank of Commerce from this deposit?

(1.5 marks)

    iii. show Bank of Commerce new balance sheet if the bank loan out as much as they can.

(2 marks)

**Continued...**

c) After infinite rounds of depositing and lending, what is the maximum increase in checking account deposits that can result from RM1 million deposit? What is the maximum increase in the money supply?

(4 marks)

**Part B**

a) Use the money demand and money supply model to show the money market is in equilibrium with nominal interest rate of 5 percent and the quantity of money of $800 billion.

(3 marks)

b) Suppose the central bank increases the money supply to $850 billion.
   i. Show the increase in money supply in the diagram drawn in (a)

(1 mark)

   ii. If the nominal interest rate remains at 5 percent, will households and firms now be holding more money or less money than they want to hold, and will they be buying or selling short-term financial assets? Explain what will happen to the equilibrium nominal interest rate

(3 marks)

**[TOTAL 20 MARKS]**

***Question 2***

**Part A**

***Exhibit 7*** shows data collected in the household survey for December, 2019.

| | |
|---|---|
| Population (ages 16 and above) | 3 million |
| Employed | 1.5 million |
| Labour force participation rate | 75% |

***Exhibit 7***

Based on ***Exhibit 7***,

a) calculate the number in the labour force.

(2 marks)

b) calculate the number of unemployed workers.

(2 marks)

c) calculate the unemployment rate.

(2 marks)

d) if the government of the country described in ***Exhibit 7*** has determined that the natural rate of unemployment is 6%. How many cyclically unemployed workers are there?

(2 marks)

e) suppose that the economy described in ***Exhibit 7*** moves out of a long recession, job openings increase, and 100,000 discouraged workers become "encouraged" and begin searching for a job. Calculate the new unemployment rate.

(2 marks)

**Continued...**

## Part B

Suppose that Victoria Beckham takes out a loan at the bank for £500,000 and is required to pay it back with interest of £50,000 at the end of the year. Suppose that there was no inflation at all when he took out the loan. However, assume that by the end of the year, the price index has increased from 100 to 106. Calculate both the nominal interest rate and the real interest rate on this simple loan arrangement.

(5 marks)

**[TOTAL 15 MARKS]**

### *Question 3*

Consider two countries, Vietnam and Thailand, each capable of producing handbags and jackets. Suppose a worker in Vietnam can produce either 15 handbags or 3 jackets while a worker in Thailand can produce either 18 handbags or 6 jackets.

a) What is the opportunity cost of producing each handbag in each country?

(2 marks)

b) What is the opportunity cost of producing each jacket in each country?

(2 marks)

c) Which country has a comparative advantage in handbag's production? Which country has a comparative advantage in jacket's production? Briefly explain.

(3 marks)

d) Suppose each country has 1,000 workers. Currently, each country devotes 40 percent of its labour force to handbag's production and 60 percent to jacket's production. What is the output of handbags and jackets produced by each country?

(2 marks)

e) Suppose each country specialises in the production of the good in which it has a comparative advantage. What is the number of handbags and jackets produced by the two countries?

(2 marks)

f) Suppose both countries specialise in goods for which they have the comparative advantage and trade 1,600 jackets for 8,400 handbags. What would be the consumption bundles of handbags and jackets after trade for both countries?

(4 marks)

**[TOTAL 15 MARKS]**

**Continued...**

*Question 4*

**Part A**

***Exhibit 8*** describes the economy of U.K. in year 2022.

| Item | £ amount (billion) |
|---|---|
| Merchandise exports | 400 |
| Services (exports) | 80 |
| U.K. investment abroad | 33 |
| Income from U.K assets abroad | 15 |
| Foreign investment in the U.K. | 50 |
| Increase in U.K. official reserve assets | 5 |
| Income from foreign assets in the U.K. | 20 |
| Reduce in foreign official reserve assets in the U.K. | 4 |
| Merchandise imports | 410 |
| Services (imports) | 34 |
| Net unilateral transfers | -18 |

***Exhibit 8***

Based on ***Exhibit 8***, calculate

a) merchandise trade balance.

(1.5 marks)

b) current account balance.

(4 marks)

c) capital account balance.

(1.5 marks)

d) the official reserve balance.

(1.5 marks)

e) statistical discrepancies.

(2.5 marks)

**Part B**

a) Graph the supply and demand for the foreign exchange market, expressed in terms of Malaysian ringgit per U.S dollar. Show the equilibrium exchange rate at RM4 per dollar.

(3 marks)

b) Suppose that now the exchange rate between ringgit and dollar is fixed at RM3.80 per dollar. Show this fixed exchange rate in the diagram drawn in part (a).

(2 marks)

c) Based on (b),

i) is ringgit overvalued or undervalued?

(1 mark)

ii) what would happen to the balance of payments of Malaysia?

(1 mark)

**Continued...**

iii) if Malaysia wish to maintain the fixed exchange rate, will the central bank of Malaysia need to buy dollar in exchange of ringgit or sell dollar in exchange for ringgit?

(1 mark)

iv) what would happen to Malaysia's international reserves if the fixed exchange rate is maintained at RM3.80 per dollar?

(1 mark)

**[TOTAL 20 MARKS]**

**End of paper**